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Patentanmeldung Nr. Patent application No. Demande de brevet n°

03077665.2

Der Präsident des Europäischen Patentamts;
Im Auftrag

For the President of the European Patent Office

Le Président de l'Office européen des brevets
p.o.

R C van Dijk

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Bezeichnung der Erfindung/Title of the invention/Titre de l'invention:
(Falls die Bezeichnung der Erfindung nicht angegeben ist, siehe Beschreibung.
If no title is shown please refer to the description.
Si aucun titre n'est indiqué se référer à la description.)

Kit containing meal components

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KIT CONTAINING MEAL COMPONENTS

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TECHNICAL FIELD

The invention deals with a package containing separate meal components, a so-called meal kit, particularly a kit comprising herbs as an ingredient.

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BACKGROUND AND PRIOR ART

A meal kit consists of a package containing at least two components or ingredients with which a meal can be prepared. The prepared meal may consist of a single dish or several dishes. The meal kit may provide a meal which is ready for eating or which needs some additional handling including cooking of one or more ingredients and/or combining ingredients into a dish. The ingredients and components are present in the kit, e.g. as separate kit items, non-packed or packed just as their composition or consistency requires. Usually each ingredient is apportioned which means that it is present in an amount sufficient for the preparation of

the meal for which the kit is intended. Often the meal kit is provided with a cooking recipe. EP1186541 shows an example of a meal kit in the form of a box.

Meal kits provide the consumer primarily a commodity benefit
5 consisting of minimizing time for shopping and cooking, so not having to look for separate meal ingredients in one or even more than one shop. The ingredients of the kit are carefully selected and provided in weighted portions. So a tasty meal can be prepared with minimum effort and without
10 wasting ingredients.

Traditional meal kits are composed with non-perishable ingredients having a long shelf life. However, a growing demand of easy to prepare tasty meals which nevertheless are
15 healthy and contain fresh ingredients has induced the development of fresh meal kits. Fresh means that one or more perishable ingredients such as fresh vegetables and herbs, fresh meat and fish are included. Chilled storage of those meal kits enables a reasonable shelf life. Depending on the
20 most sensitive ingredient the shelf life varies from a few days to a few weeks.

In a freshly cooked meal the addition of fresh herbs is much appreciated because they highly contribute to colour and
25 flavour of the dish. However, the deterioration of freshly cut herbs, particularly of basil, proceeds so quickly that practically it is not possible to provide fresh meal kits, even when chilled, with freshly cut herbs and still preserve freshness of the kit for more than 3 - 5 days depending on
30 the type of herb. Therefore, in a meal kit herbs necessarily are included only in dried form, so their contribution to the meal's aroma and colour is poor.

SUMMARY OF THE INVENTION

We have developed a meal kit consisting of a package comprising at least two separate items chosen from the group consisting of ingredients and components suitable for preparing a meal or a dish, characterized in that at least one of the items consists of a living, edible plant or a living, edible part of such plant of which the roots and/or the stem are in effective contact with a moisture source.

10 Effective contact means that the roots and/or the stem when in contact with the aqueous fluid source, can absorb enough moisture together with any dissolved substance to have their freshness prolonged. The prolonged freshness enables considerable extension of the shelf life of the meal kit.

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DESCRIPTION OF THE FIGURES

Figure 1 shows a meal kit according to the invention consisting of a secondary packaging (a) containing several items (b) with a primary packaging (c) including a living plant (d) rooted in a growth medium (e).

20

Figure 2 shows an example how a living plant can be included in a meal kit (figure 2a). Figure 2b shows the two parts of the plant package: a bottom part provided with a growth medium wherein seeds which can germ and grow in the medium. The upper part of the package acts like a little greenhouse by protecting the growing plants and helping to control the atmosphere surrounding the plants (figure 2c).

30

The consumer after having taken the plant container from the meal kit can open it and cut the plants from the growth medium to use these as fresh ingredients for the meal (figure 2d).

DETAILS OF THE INVENTION

5 It is known that plants, including herbs for kitchen use,
may be offered for sale in packages which contain a
moisture source which helps to keep the plants fresh. With
regard to the present invention the condition denoted with
freshness should be understood as the plant having
10 substantially the same outer appearance as a healthy plant
before it was removed from the place where it lived in
nature or where it was grown in culture. Both US patents
6138828 and 2003/0024163 illustrate ways to preserve
freshness of plants. Those documents describe plants of
15 which the roots are cut. Other provisions for freshness
maintenance consist of plants growing in pots or trays
filled with a moist solid growth medium such as ordinary
soil. Its moisture content is sufficient for leaving the
plants without watering care during several days. US
20 2003/0024163 shows a closable tray in which e.g. herb
plants can be grown and stored for several days without
watering care.

Ordinary soil is the most common growth medium, but
alternatives are available such as gels and spongy, porous
25 materials such as porous stone which are able to retain
water for quite some time. These materials are already used
e.g. in modern greenhouses and for prolonging the freshness
of flower arrangements. Plants, particularly fresh herbs,
often are not available in the average supermarket. For
30 obtaining herbs a vegetables shop, for example, must be
visited. The season may be another reason for poor
availability. Finally, the amount of herb material of a
common herb plant far exceeds what is needed for preparing

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an ordinary meal and the excess is discarded as waste or requires nurturing care for possible future use. The use of packed, living plants, particularly of fresh herbs, in appropriate amounts in meal kits, up to now have 5 been overlooked.

The present invention is based on the finding that a meal kit containing an apportioned amount of a fresh edible, living plant or an edible, living part of a plant can be 10 realized by including in the package a living plant of a size or amount which is appropriate for the cooking of the meal for which the kit is intended, provided the package has a provision which ensures an uninterrupted flow of moisture to the plant. It is also important that the plant 15 can continue to absorb and release metabolic gases such as carbon dioxide and oxygen. In this way the freshness of the plant in the meal kit package can be prolonged considerably without special care.

The roots or the stem of the plant in the kit are 20 surrounded by a material acting as a moisture source, for example ordinary plant soil, which can effectively donate moisture to the plant. For hygienic reasons preferably an artificial growth medium comprising spongy, porous materials, which may be made of organic or mineral fibers 25 is selected and which preferably is chosen from the group consisting of OASIS™, spongy stone and aqueous gel. The medium contains an aqueous fluid as a moisture source. This aqueous fluid may be plain water, but it may be beneficial for further extending the plant's freshness period to have 30 dissolved in the moisture source soluble plant nutrients and/or agents for suppressing growth of the plant and/or of microorganisms.

The meal kit of the invention preferably is made suited for storage under chilled conditions which means storage at an average temperature of 4°-10°C.

5 The meal kit usually contains several, at least two ingredients or components with which a meal can be prepared, fresh ingredients as well as non perishable ones. Meal kit items denoted as components are more or less ready for composing the meal, since they do not need much or any
10 preparation effort. Chilled storage is recommended particularly for the fresh ingredients which comprise products usually selected from the group consisting of meat, fish, vegetables, herbs, fruits, sauces and fresh pastas and noodles.

15 Ingredients as dry rice, dry pasta and canned food do not need chilled storage.

The plant in the meal kit preferably consists of herbs, preferably herbs selected from the group consisting of parsley, basil, marjoram, oreganum, mint, thyme, bay, dill,
20 mace, sage, sorrel, fennel and cress. The invention also enables the prolongement of the freshness of other edible, living plants contained in meal kits comprising for example vegetables, rucola, fruits and onions.

Living plants are distinguished from plants which are no
25 longer living in that living plants show metabolic activities and in particular respirational activity which activity can be observed and measured by the absorbance or release of the gases oxygen and carbon dioxide.

30 In order to help the consumer obtaining a satisfactory cooking result the kit preferably is provided with cooking instructions and suggestions printed on the package or on a separate leaflet.

- The overall package of the meal kit may take several forms which are determined by reasons of functionality and attractive presentation. It may have the form of a tray with recesses for each ingredient and sealed by a
- 5 transparent cover sheet. Alternatively, the package may consist of a rigid box or a more or less flexible bag. The box and the bag contain the separate kit items which are packed (or not) each according to its typical composition and consistency.
- 10 Preferably the meal kit's package has a transparency which allows exposure of the plant to light and allows visual inspection of the plant's freshness.
- 15 Preferably, the packaging material allows mass transfer for gases such as oxygen, carbon dioxide and water vapour to either direction which means from the inside of the plant and kit package to the surrounding atmosphere and from the surrounding atmosphere into the plant package. The
- 20 absorbance and release of these gases is part of the plant's metabolism. More preferably the package material is chosen such that it provides permeability for such gases. Anyway the package of the plant should be sealed such that water leakage into the meal kit is prevented.
- 25 The kit may contain more than one kind of plant, each one packed in an amount which is appropriate for preparing the dish or the meal of the kit. By attuning the amount, no waste remains. No waste helps to keep the costs for
- 30 including expensive plants reasonable.

A further benefit of the present invention is that it not only allows the inclusion of herbs which often are expensive plants, but also of plants which are considered

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as very sensitive for withering such as basil, which loses its freshness very quickly after cutting.

The attached drawings show a particular embodiment of the invention. They are included for illustration purposes only and may not be construed as limiting the invention.

C L A I M S

1. Meal kit consisting of a package comprising at least two separate items chosen from the group consisting of ingredients and components suitable for preparing a meal or a dish, characterized in that at least one of the items consists of a living, edible plant or a living, edible part of a plant of which the roots and/or the stem are in effective contact with a moisture source.
2. Meal kit according to the previous claim, characterized in that the plant consists of one or more herbs, preferably selected from the group consisting of parsley, basil, marjoram, oreganum, mint, thyme, bay, dill, mace, sage, sorrel, fennel and cress.
3. Meal kit according to the previous claims, characterized in that the moisture source is selected from the group consisting of natural plant soil or an artificial growth medium comprising spongy, porous materials, preferably from the group consisting of OASIS™, spongy stone and aqueous gel, which medium contains an aqueous fluid.
4. Meal kit according to the previous claims, characterized in that the package contains at least two different kinds of plants.
5. Meal kit according to the previous claims, characterized in that the ingredients are presents in an amount which is apportioned and appropriate for preparing the meal for which the meal kit is intended.
6. Meal kit according to the previous claims, characterized in that its package transparency allows exposure of the

plant to light and allows visual inspection of the plant's freshness.

7. Meal kit according to the previous claims, characterized in that its package allows mass transfer of the metabolic gases water vapour, oxygen and carbon dioxide to and from the surrounding atmosphere.
8. Meal kit according to the previous claims, characterized in that the kit is made suitable for chilled storage.
9. Method for prolonging freshness a living, edible plant or a living, edible part of a plant packed with other meal ingredients and components in a meal kit, characterized in that the plant or the plant part is in effective contact with a moisture source, such that during storage of the meal kit the moisture source can donate to the plant or plant part enough aqueous fluid to preserve its freshness.

A B S T R A C T

A meal kit which contains an edible, living plant, particularly fresh herbs. The freshness of the plant in the kit is prolonged by an effective contact of the plant's stem or roots with a moisture donating source. This provision allows a considerable extension of the shelf life of the meal kit. Chilled storage of the kit is recommended.

Figure 1/2

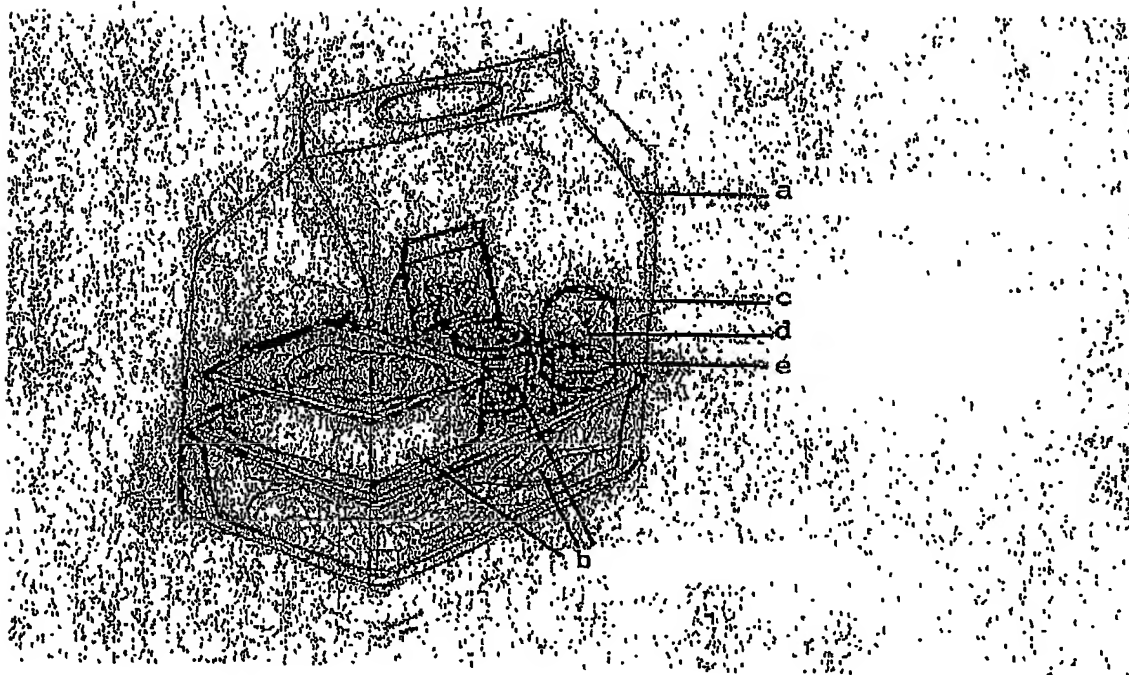
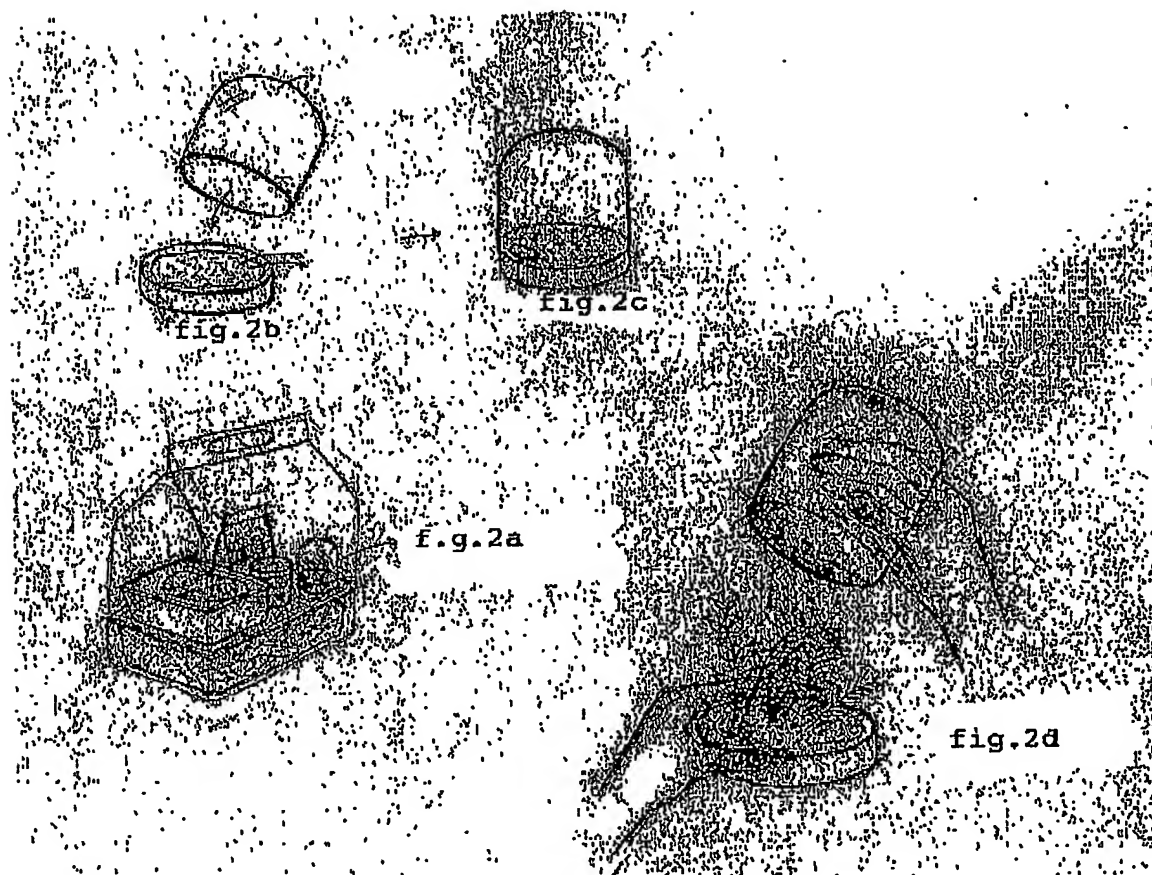


Figure 2/2



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